

CLAIMS:

1. A camera module comprising a holder provided with a light-conducting channel, within which channel a lens having an optical axis is present, a solid-state image sensor being present near an end of said light-conducting channel, which image sensor comprises an image pick-up section oriented perpendicularly to the optical axis, characterized
5 in that aligning means forming part of the holder are present near the end of the light-conducting channel, which aligning means align the image pick-up section with respect to the optical axis.
2. A camera module as claimed in claim 1, characterized in that the image pick-
10 up section extends in a plane parallel to a main surface of the solid-state image sensor, in which the solid-state image sensor comprises lateral surfaces oriented at least substantially perpendicularly to the main surface, and in which the holder is at least substantially polygonal near the end, seen in cross-sectional view in a direction perpendicular to the optical axis, in which the aligning means comprise an extension of the holder, which
15 extension extends beyond the end of the light-conducting channel and which has an inner surface that abuts against at least one of the lateral surfaces of the solid-state image sensor, as a result of which the solid-state image sensor is contained within the holder substantially without play in a direction perpendicular to the optical axis.
- 20 3. A camera module as claimed in claim 2, characterized in that said polygon is a rectangle.
4. A camera module as claimed in claim 3, characterized in that said extension abuts at least substantially against three of the lateral surfaces of the solid-state image sensor.
- 25 5. A camera module as claimed in claim 4, characterized in that the end of the light-conducting channel is provided with an abutting surface oriented perpendicularly to the optical axis, against which the main surface of the solid-state image sensor abuts substantially without play, thereby determining the distance from the image pick-up section to the lens.

6. A camera module as claimed in claim 2, characterized in that the camera module comprises a substrate, that the solid-state image sensor is provided with a second main surface which is oriented perpendicularly to the main surface, that the extension has a second end which coincides at least substantially with the plane in which also the second main surface extends, which second main surface and which second end abut against the substrate.

7. A camera module as claimed in claim 6, characterized in that the holder is provided with pins whose longitudinal axis extends parallel to the optical axis, which pins are fixed to the second end, with the pins being located in openings in the substrate, thereby aligning the camera module with respect to the substrate.

8. A camera module as claimed in claim 2 or 6, characterized in that the main surface of the solid-state image sensor extends outside the light-conducting channel, with pads being provided on the part of the main surface outside the light-conducting channel, which pads function to provide electrical connections to electric circuits located outside the solid-state image sensor.

9. A camera module as claimed in claim 8, characterized in that an outer wall of the holder is provided with at least one supporting wall, which extends parallel to the optical axis and which abuts against one of the lateral surfaces of the solid-state image sensor insofar as it extends outside the light-conducting channel.

10. A holder for use in a camera module, which holder is provided with a light-conducting channel, which is arranged for accommodating a lens having an optical axis and which is furthermore arranged for the placement of a solid-state image sensor comprising an image pick-up section near an end of the light-conducting channel, characterized in that aligning means forming part of the holder are present near said end of the light-conducting channel for aligning the image pick-up section with respect to the optical axis.

11. A camera system comprising a camera module with a holder provided with a light-conducting channel in which a lens having an optical axis is present, in which a solid-state image sensor provided with an image pick-up section oriented perpendicularly to the

optical axis is present near an end of the light-conducting channel, and in which aligning means forming part of the holder are present near said end of the light-conducting channel for aligning the image pick-up section with respect to the optical axis.

- 5 12. A method of manufacturing a camera module comprising a holder, characterized in that the holder is provided with aligning means, in which the solid-state image sensor comes into contact with the aligning means upon placement of the solid-state image sensor in said holder, as a result of which an image pick-up section present on the solid-state image sensor is aligned with respect to an optical axis.